

Appl. No. : 09/776,232
Filed : February 02, 2001

AMENDMENTS TO THE CLAIMS

1-37. (Cancelled)

38. (Amended) A method of inducing a CTL response in a mammal, which method comprises:
delivering a liquid comprising a cell-free antigen directly to the lymphatic system, a lymph node or lymph vessel of the mammal at a level sufficient to induce a CTL response in the mammal; and
maintaining the antigen in the mammal's lymphatic system over time sufficient to induce the CTL response.

39. (Previously added) The method of Claim 38, wherein the antigen is delivered directly to a lymph node.

40. (Previously added) The method of Claim 38, wherein the antigen comprises a protein or peptide.

41. (Previously added) The method of Claim 38, wherein the antigen is delivered in a single bolus.

42. (Previously added) The method of Claim 38, wherein the antigen comprises a microorganism.

43. (Previously added) The method of Claim 38, wherein the antigen is delivered in the form of a nucleic acid encoding the antigen.

44. (Previously added) The method of Claim 43, wherein said nucleic acid is plasmid DNA in a formulation comprising about 1-10% ethyl alcohol, 0-1% benzyl alcohol, 0.25-0.5mM EDTA and a citrate-phosphate buffer of pH 7.4-7.8, comprising about 3-50mM citrate and about 90-200mM phosphate.

45. (Previously added) A method of inducing a CTL response in a mammal, which method comprises:
delivering a liquid comprising an a cell-free antigen in a continuous, repeated, or sustained manner directly to the lymphatic system a lymph node or lymph vessel of the mammal at a level sufficient to induce a CTL response in the mammal; and
maintaining the antigen in the mammal's lymphatic system over time sufficient to induce the CTL response.

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46. (Previously added) The method of Claim 45, wherein induction of cytotoxic T lymphocytes is obtainable independent of immunopotentiator.

47. (Previously added) The method of Claim 46, wherein the antigen is delivered with a cytokine.

48. (Previously added) The method of Claim 46, wherein the antigen is delivered in the form of a nucleic acid encoding the antigen.

49. (Previously added) The method of Claim 45, wherein the antigen is provided as a component of a microorganism cell, and wherein said microorganism cell comprises a recombinant nucleic acid encoding or promoting expression of said antigen.

50. (Previously added) The method of Claim 45, wherein the CTL response comprises an immunological CTL response.

51. (Previously added) The method of Claim 45, further comprising obtaining a sustained CTL response in the mammal and detecting a CTL response in the mammal.

52-59. (Cancelled)

60. (Amended) The method of Claim 38, wherein said delivering step further comprises delivering said liquid directly to the lymphatic system-lymph node or lymph vessel of the mammal from a device external to the mammal.

61. (Amended) The method of Claim 45, wherein said delivering step further comprises delivering said liquid directly to the lymphatic system-lymph node or lymph vessel of the mammal from a device external to the mammal.

62. (New) The method of Claim 38, wherein the antigen is delivered continuously over a period of time.